

Rush

Shortage for shipment

Work Order ID 140211

140211

Page 1

Thursday, December 17, 2015 3:44:27 PM

Item ID: D4854-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lower Bracket (Replaces P/N G13013-2)

Start Date: 12/17/2015 Start Qty: 4.00

**4* 20 SH*
**4* 20*

Cust Item ID:

Required Date: 12/17/2015 Req'd Qty: 4.00

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: JAN 04 2016

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #
Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4854

A

100

0.00

100

Waterjet

Memo

0.01

FLOW CNC Waterjet

CUT AS PER FILE

DWG REV: A

PROG REV: A

DEBURR

105

QC2- Inspect parts off machine FAI/FAIB

0.00

105

QC

Memo

0.00

Quality Control

(10) on 16/02/04

(10) on 16/02/04

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																																																																																																						
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Page 2

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
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Past Expiry Date	☐	Manufacturing Process	☐							
Misidentified	☐	Past Due	☐							
				OTHER :						

Work Order ID 140211

Thursday, December 17, 2015 3:44:27 PM

140211

Page 3

Item ID: D4854-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Lower Bracket (Replaces P/N G13013-2)
 Start Date: 12/17/2015 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 12/17/2015 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00				10		16-2-8	JL
140	HandFinish	0.00							
	Hand Finishing								
150	QC7-Inspect Chemical Conversion Coat	0.00				10	0	16-02-8	DAS 34 9:00
150	QC	0.00							
	Quality Control								
160	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
160	Powdercoat	0.00							
	Powder Coating								

START: 3:20.
 O.V. T: 3:20
 FINISH: 3:50.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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								Lead hand / Supervisor Approval Verification 	
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Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
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Past Expiry Date	☐	Manufacturing Process	☐	OTHER : 						
Misidentified	☐	Past Due	☐							

Work Order ID 140211

140211

Page 4

Thursday, December 17, 2015 3:44:27 PM

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC3- Inspect Part Finish	0.00							
170									
QC	Memo	0.00				(10)			DAS 38 9-89
Quality Control									FEB 09 2016
180	Identify as per dwg & Stock Location: <u>51526</u>	0.00							
180									
Packaging	Memo	0.00				10			DAS 6 9-89
Packaging									FEB 09 2016
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.01							
Quality Control									FEB 10 2016

(N) 16-02-09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Thursday, December 17, 2015 3:44:26 PM

Page 1

Work Order ID: 140211

140211

Parent Item: D4854-1

D4854-1

Parent Item Name: Lower Bracket (Replaces P/N G13013-2)

Start Date: 12/17/2015

Required Date: 12/17/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A NEW ISSUE 13-07-22 JLM VERIFIED BY:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6B0.750X04.00
0

Purchased

No

f

67.7000

1.749895

M6061T6B0 750X04 000

6061-T6 Bar .750 x 4.00

Dec 16 / 02 / 09

Location

Loc Qty

Loc Code

MAT002

67.7

m127510

30

m127797

37.7

3.25

DQA: _____ Date: _____

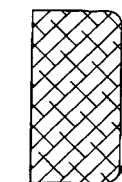
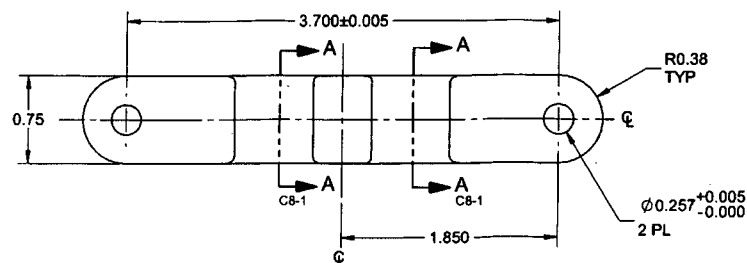


WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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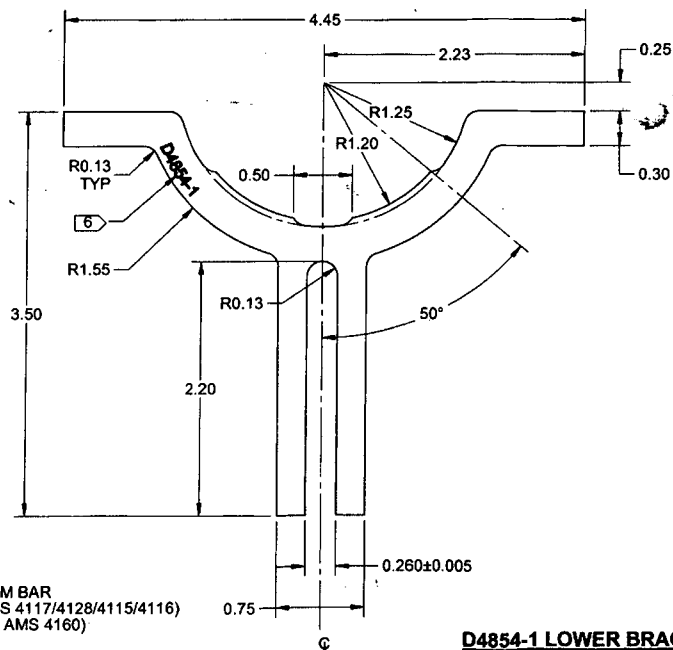
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		OTHER : ☐							



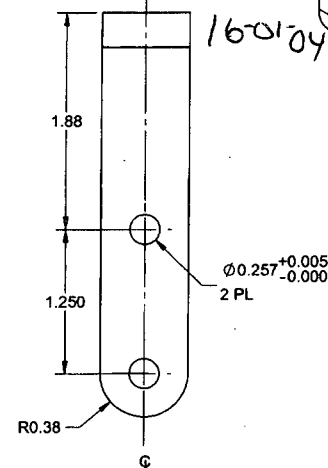
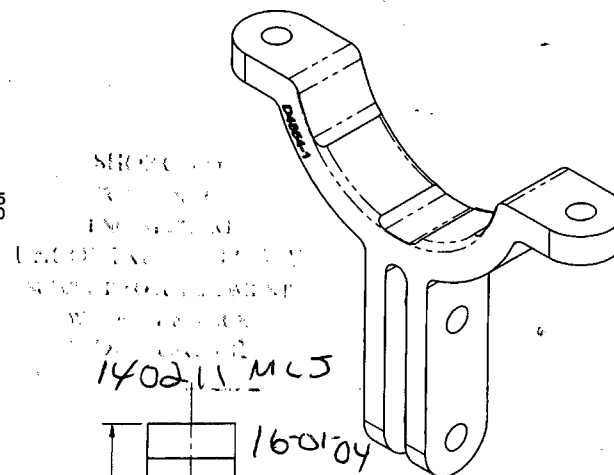
SECTION A-A
SCALE 2X

D5-1

R0.06 MIN - R0.10 MAX
2 PL



D4854-1 LOWER BRACKET



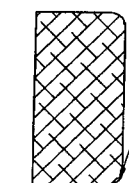
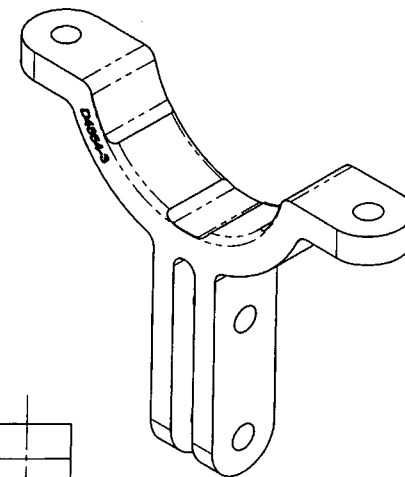
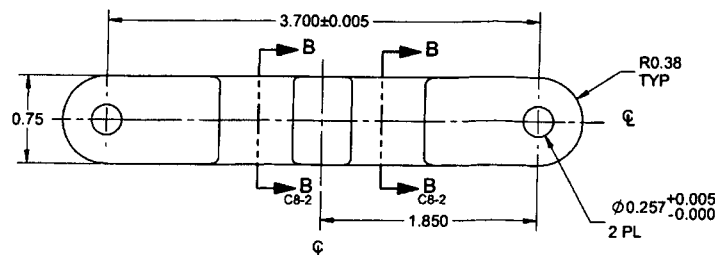
RELEASED
2013-07-16

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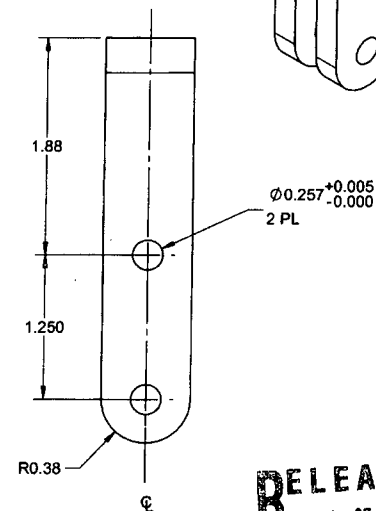
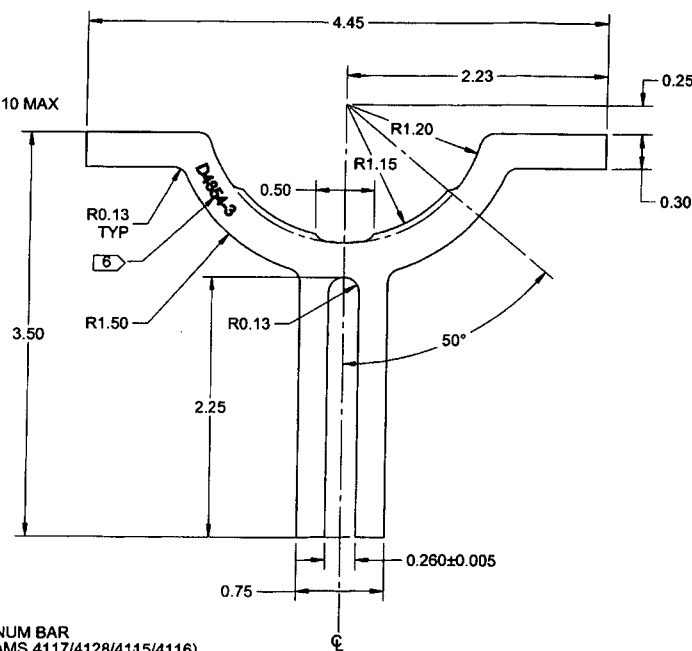
- 1) MATERIAL: 6061-T6/T651/T6511/T62 ALUMINUM BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
PER DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AS SHOWN PER QSI 044 6.3 TO A DEPTH
OF 0.010±0.005 IN THIS LOCATION WITH TOOL TIP
RADIUS OF 0.015±0.005
- 7) WEIGHT: 0.19 lbs
- 8) REPLACES GENEVA P/N G13013-2

A	NEW ISSUE		05	13.05.15
REV.	DESCRIPTION		BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED			DRAWING NO.	REV.
MFG. APPR.			D4854	SHEET 1 OF
APPROVED			TITLE	SCALE
DE APPR.		LOWER BRACKET	NTS	
DATE	13.05.15		COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



SECTION B-B
SCALE 2X
DS-2



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2013-07-16

NOTES:

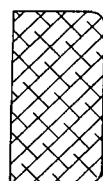
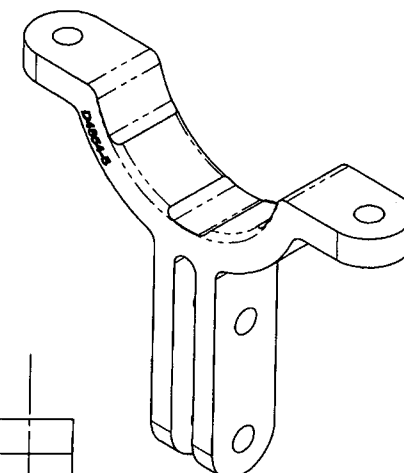
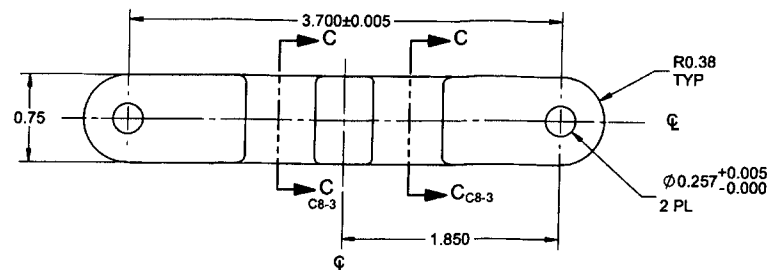
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
PER DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AS SHOWN PER QSI 044 6.3 TO A DEPTH
OF 0.010±0.005 IN THIS LOCATION WITH TOOL TIP
RADIUS OF 0.015±0.005
- 7) WEIGHT: 0.19 lbs
- 8) REPLACES GENEVA P/N G13013-6

D4854-3 LOWER BRACKET

DESIGN	08	DART AEROSPACE LTD	
DRAWN	08	HAWKESBURY, ONTARIO, CANADA	
CHECKED	08	DRAWING NO.	REV. A
MFG. APPR.	08	D4854	SHEET 2 OF 4
APPROVED	08	TITLE	SCALE
DE APPR.	08	LOWER BRACKET	NTS
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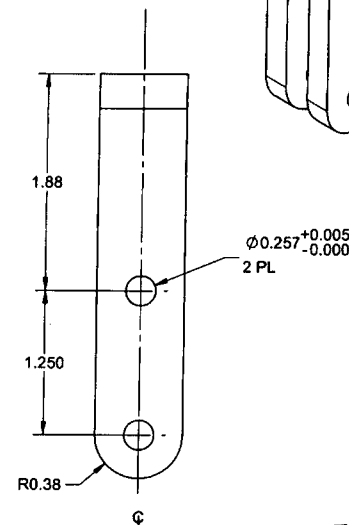
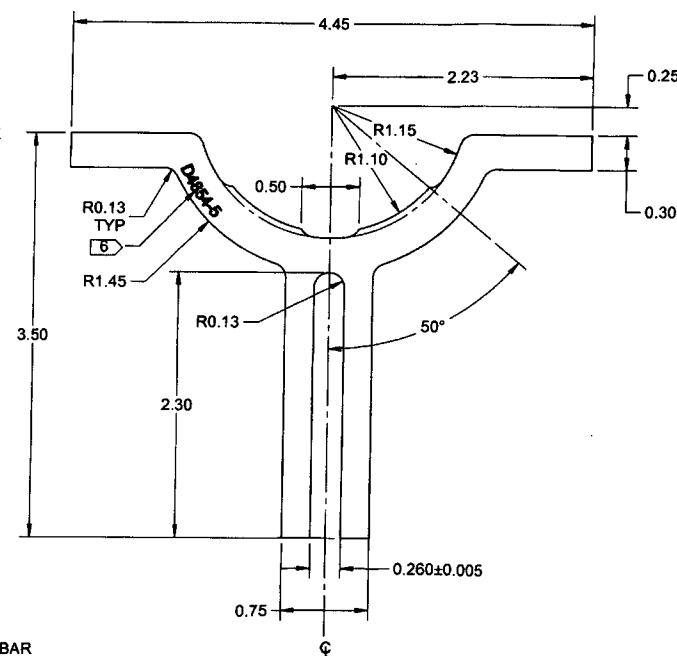
8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



SECTION C-C
SCALE 2X
D5-3

R0.06 MIN - R0.10 MAX
2 PL



NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
PER DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AS SHOWN PER QSI 044 6.3 TO A DEPTH
OF 0.010 ± 0.005 IN THIS LOCATION WITH TOOL TIP
RADIUS OF 0.015 ± 0.005
- 7) WEIGHT: 0.19 lbs
- 8) REPACES GENEVA P/N G13013-8

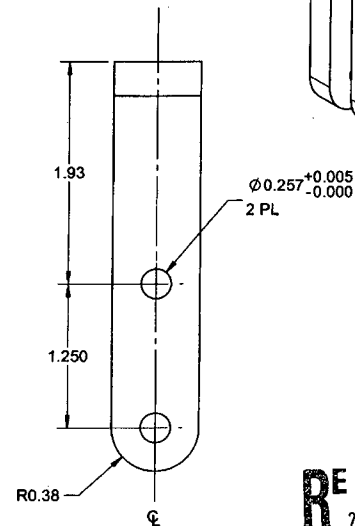
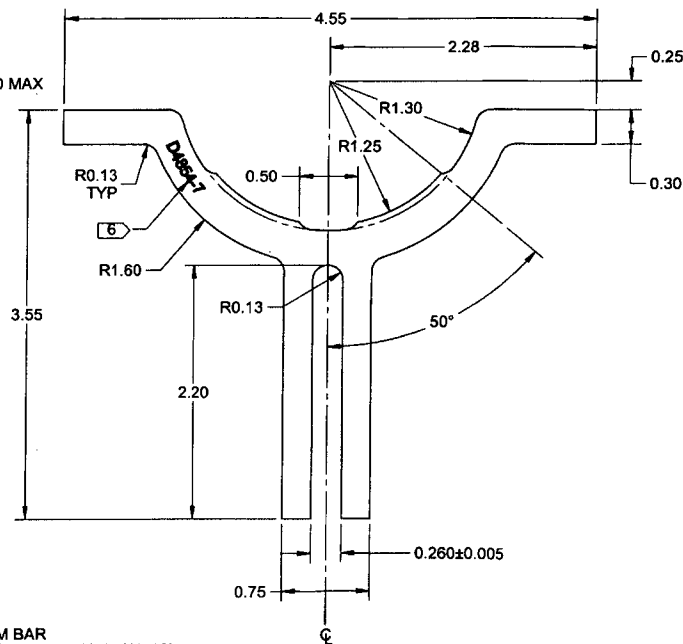
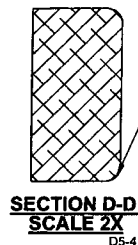
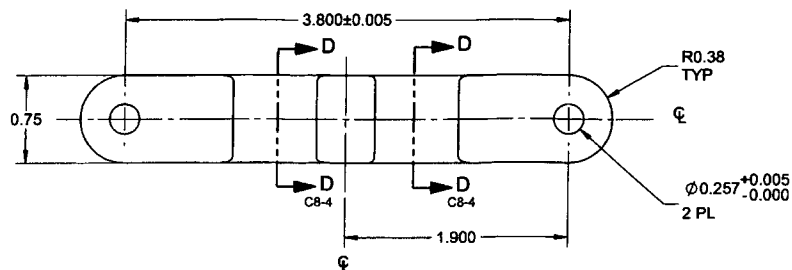
D4854-5 LOWER BRACKET

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2013-07-16

DESIGN	03	DART AEROSPACE LTD	
DRAWN	03	HAWKESBURY, ONTARIO, CANADA	
CHECKED	03	DRAWING NO.	REV. A
MFG. APPR.	03	D4854	SHEET 3 OF 4
APPROVED	03	TITLE	SCALE
DE APPR.	03	LOWER BRACKET	NTS
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8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



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NOTES:

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
PER DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AS SHOWN PER QSI 044 6.3 TO A DEPTH
OF 0.010±0.005 IN THIS LOCATION WITH TOOL TIP
RADIUS OF 0.015±0.005
- 7) WEIGHT: 0.19 lbs
- 8) REPACES GENEVA P/N G13013-10

D4854-7 LOWER BRACKET

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4854
MFG. APPR.		REV. A SHEET 4 OF 4
APPROVED		TITLE LOWER BRACKET
DE APPR.		SCALE NTS
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8 7 6 5 4 3 2 1